II. Settlement and Demarcation.

H. SETTLEMENT AND DEMARCATION REPORT—*concluded.*

where both classes of reserves may be represented on the same map, indicating the limits of each by their respective colours. The position of the forest boundary marks should also be entered in the map.

The map should be accompanied with a statement showing in a tabular form the survey numbers, areas and assessment of such lands as have been included in the reserves. On receipt of these papers the Superintendent of Survey will make the necessary correction in the survey records, returning the demarcation map to the Conservator. The Superintendent should, at the same time, furnish the Conservator with two fresh copies of the village map with the forest boundaries shown thereon. The Superintendent should make the reduction of assessment appertaining to the lands taken up for the reserves, reporting the amount to the Commissioner in view to his issuing orders for its being deducted from the village accounts.*

Disposal of settlement and demarcation records.

163. The entire record of a Forest Settlement and Demarcation Officer, including original maps, proceedings, etc., should on the completion of the work be made over to the Collector and remain in his record room. Copies of such of the maps and documents as the Commissioners consider are likely to prove useful to Forest and Revenue Officers should be supplied to them.†

Forest register of rights.

164. The forest register should contain an accurate statement of all rights and privileges. It should be prepared and signed by the Forest Settlement Officer after the work of settlement and demarcation is complete. In effecting settlements when no rights are admitted an entry to that effect should be made in the forest register.‡

III. Boundaries, Boundary-marks and Fencing of Forests.

A. Boundaries and Boundary-marks.

Prickly-pear fencing.

165. Prickly-pear should not be used for fencing when any other description of hedge is available.§

Economy to be practised in erecting boundary-marks.

166. Care should be taken to practise economy in the erection of the longer description of boundary-marks in forest. There is no necessity for their being so near together as at intervals of a hundred feet. It will be advisable that the one on each side of it should be visible from each of these. With this exception, all intermediate bends may be denoted by smaller marks.‖

* Government Resolution No. 7270, dated 11th December 1876.

† Government Resolutions No. 1265, dated 13th February 1891; and No. 2165, dated 24th March 1891.

‡ Government Resolutions No. 3263, dated 7th June 1881; and No. 7232, dated 12th September 1892.

§ Government Resolution No. 2169, dated 7th May 1870.

‖ Government Resolution No. 4082, dated 23rd August 1871.

III. Boundaries, Boundary-marks and Fencing of Forests.

A. BOUNDARIES AND BOUNDARY-MARKS—*continued.*

Boundary-marks of interior survey need not be kept up; those outside should be annually repaired.

167. The boundary-marks of interior survey numbers of a forest block may be allowed to fall into disrepair, the boundary-marks on the outer boundary of the outer survey numbers on the forest reserve boundaries being annually inspected and repaired.*

Plantations and reserved forest should be clearly demarcated.

168. Government wish to impress upon the Forest Department the desirability of proper demarcation, fencing and guarding of plantations and forest reserves. The mere fact that a few seeds have been sown in a portion of a *gáirán* is not sufficient to entitle a Forest Officer to treat as trespassing, and to send summarily to the pound, cattle which may happen to enter that part of the *gáirán*. There must be some outward and visible sign of closure of *gáirán* in the shape of fences or watchers. In future, when a portion of a *gáirán* has been prepared for closure by the Forest Department, the Forest Officer should report the fact to the Assistant Collector, who will take measures to ascertain if the necessary fences have been erected, and if satisfied on this point will then give orders for the closing of portion of *gáirán*. No cattle should be allowed to be seized or impounded by the Forest Guards until the formal orders, as above directed, by the Assistant Collector for the closure of the land have been issued.†

Rules regarding boundary-marks and their upkeep.

Rules relating to forest boundary-marks and their upkeep.

169. (1) A special forest boundary-mark is to be built at every survey mark.

(2) If the survey boundary-marks are so far apart that the special forest boundary-mark at them cannot be seen owing to the distance, or the physical configuration of the ground, then intermediate special forest boundary-marks must be erected between the two points so as to make the line clearly visible.

(3) To avoid erecting more special forest boundary-marks than are absolutely necessary, and also to define the true line of the boundary clearly, all bushes and undergrowth between two boundary-marks should first be removed.

(4) This clearing should consist of cutting down only all the undergrowth that impedes the view, preventing one forest boundary-mark being seen from its neighbouring one, or when crossing the boundary line at any point, two boundary-marks, one on the right hand and the other on the left should be visible.

(5) The breadth in the clearance should, in no case, exceed 6 feet or two paces, unless the line constitutes a fire-line.

(6) Nothing is to be cut growing outside of the true forest boundary-line.

(7) Trees on the boundary should not be cut down so long as they do not obscure the view of the boundary-marks one from the other, unless for clearing a fire-line.

* Government Resolution No. 6626, dated 7th November 1877.
† Government Resolution No. 1866, dated 10th April 1880.

III. Boundaries, Boundary-marks and Fencing of Forests.

A. BOUNDARIES AND BOUNDARY-MARKS—*continued.*

(8) Where there is but little to cut, the Beat Guard can clear the boundary-line with his own hand.

(9) But where the undergrowth is heavy and the material is saleable the work may be undertaken at Government cost, funds being provided for it in the budget.

(10) Where the undergrowth is heavy and there is no sale for it, Range Forest Officers should, if possible, arrange to have it cut by the villagers, giving them in remuneration the material cut. But in each such case the sanction of the Divisional Forest Officer must always be obtained previously.

(11) The Beat Guard must, after the boundary has once been cleared, keep down all regrowth.*

170. (1) In hilly country and also in the plains where stones are to be found in considerable quantity there shall be two classes of forest boundary-marks of the following specification :—

Specification of forest boundary-marks.

1st—

Shape.—A truncated cone.

Description.—Built of loose stones upon an excavated foundation so that the lowest tier of stones shall be held in position and not pushed out by the weight of the superstructure, especially when the ground becomes wet and slippery. The interstices between the large stones composing the cairn are to be filled in with small stones and the outer stones are to be wedged with stone chips. A shaped stone showing a height of at least 15 inches is to be fixed firmly on the top of the cairn in the centre.

Foundation.—Six (6) inches to be dug out.

Dimensions.—*First class mark* to have a base of 7 feet diameter, to be 5 feet high and the top to be 4 feet diameter.

Second class mark to be on a base of 4 feet diameter, to be 3½ feet high and to be 2½ feet in diameter on top.

Indicator.—A cut stone showing at least 15 inches clear of the cairn to be embedded firmly in the centre on top; the stone to be large enough for a serial number to be cut on it if required.

Colour-wash.—The stone to be colour-washed red annually and lines of the same colour are to appear on the top of the cairns radiating from the centre stone to show the direction of the boundary-lines.

N. B.—Bamboos, or Euphorbia verrifolia, Sábri, to be planted in clumps round each boundary-mark.

* Circular of the Conservator, Central Circle, dated November 1896.

III. Boundaries, Boundary-marks and Fencing of Forests.

A. BOUNDARIES AND BOUNDARY-MARKS—*continued.*

Position.—A first class boundary-mark to occupy main points and angles, such as where the boundary of a forest block, forest compartment or village may intersect the forest boundary, and where the latter may take an abrupt turn.

A second class boundary-mark to occupy intermediate points.

N. B.—(1) The boundary-marks are to be placed at visible distances one from the other, so that from any mark its neighbouring one on both sides can be seen clearly.

(2) Where loose stones are not plentiful, instead of smaller cairns to occupy intermediate stations, the first class marks can be connected by a row of stones, showing 1 foot above ground placed in a single line, one guntha chain or 22 yards apart which are to be coloured red.

Approximate cost.—A first class boundary-mark can be constructed at an expenditure of from 7 to 9 annas and a second class boundary-mark at a cost of from 2½ to 4 annas.

(2) In the plains where loose stones are not plentiful, the forest boundary-mark may consist of a truncated cone made of earth well rammed, or of sun-dried bricks, or it may consist of the ordinary revenue survey bándh or boundary-mark with a stone stuck on the top which will be coloured red and the bánds upon the forest boundary will be connected by stones showing 1 foot aboveground, to be colour-washed red.

It is desirable that the reserves on the plains shall be fenced, and the fences will be supplemental to the boundary-marks for defining and protecting the forest boundaries. Living fences may be made of Euphorbia verrifolia (Sábri) and E. tirucalli (Shér), Opuntia dillenii (Nágphani niwadung), Ingadulcis (Vilayati chinch or Deckni babool), Lawsonia alba (Mendhi), Cæsalpinia sepiaria (Chilhar or Mysore thorn), etc.*

Rules for the inspection and maintenance of forest boundary-marks.

171. (1) The Forest Guard of the beat will be responsible for the maintenance and protection of all the boundary-marks in the forests of his beat, he will colour-wash them annually after the Diváli holidays and will make a special report of having performed this work, he will repair with his own hands any marks that may become disarranged, and he will plant bamboos or other vegetation, as directed, round or close to each mark, and also upon the forest boundary-line to form a living hedge.

Each forest boundary-mark in his "beat" is to be specially inspected by the Beat Guard at least once in every three months, and a record of his inspection of marks is to be entered in his diary when it may occur.

(2) The Round Guard will be responsible for the maintenance and protection of the boundary-marks in the forests of his round, he will see that they are maintained in proper repair, are colour-washed, as directed, by the Beat Guard, and that the required measure of planting upon the forest boundaries or at or near the boundary-marks is undertaken and performed by the Beat Guard.

* Conservator's Circular.

III. Boundaries, Boundary-marks and Fencing of Forests.

A. BOUNDARIES AND BOUNDARY-MARKS—*concluded.*

The Round Guard will specially inspect every forest boundary-mark in the forests of his round once in every year and will make a record of every inspection made in his diary when it may occur, and also will submit a special report to the Divisional Forest Officer upon the state and condition of the boundary-marks, forest boundaries, living hedge, etc., as soon as he may have completed the inspection of the boundaries of any forest village or forest block.

(3) The Range Forest Officer will, during the official year, inspect and specially report upon the state and condition of the forest boundaries and forest boundary-marks of not less than two miles of forest boundary in every "beat" in his range. A record of inspections made will be entered in his diary when they may occur.*

B. Fencing.

172. The Conservator of Forests, Central Circle, should be requested to restrict wire-fencing to such works as valuable plantations, nurseries, protective reboisement works, depôt compounds, etc. The information now before Government shows it to be very doubtful whether large expenditure upon the wire-fencing of forests is likely to be justifiable in the interests of forest conservancy.

Areas round which fencing should be erected.

172a. The procedure followed in indenting for large supplies of expensive stores from England does not provide sufficiently for the obtaining of the explicit sanction and approval of Government in respect of the expenditure involved. The Governor in Council is accordingly pleased to direct that when forwarding indents of stores for compliance, the officer in charge of Forest Circles should draw special attention to items of new or unusual character, or to any unusually expensive order, and should fully explain the necessity or advantage of the expenditure involved. All forecasts of the value of the probable requirements in respect of forest stores as well as the indents for such stores should be submitted to Government in the Revenue Department.†

Procedure to be followed when indenting for fencing material or other stores from England.

IV. Forest Surveys.

A. Constitution of the Survey Department.

173. 1. All Forest Survey operations in India and Burma, other than those undertaken by local Forest officials, will be carried out under the superintendence of an officer of the Survey of India, who will be nominated by the Surveyor-General and designated Superintendent, Forest Surveys. He will be in charge of the Forest Survey Branch of the Survey of India, and his

Constitution of the Forest Survey Department.

* Conservator's Circular.

† Government Resolution No. 176, dated 10th January 1901.